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other title or shelter but the word *prerogative,* should dare to hold and retain the executive power of the state, with a hundred peers protesting against them, without the confidence of the house of commons, and themselves on their trial at the bar of that house! At the public shame of such a sight, indignation sickens into scorn. Resentment dies of contempt. *Such* authors of *such* ruin *take away all dignity from distress, and make calamity ridiculous.*

"Still we are lulled with fine promises, and flattering prospects. Hope is a dangerous narcotic, and not only sets the mind asleep, but, like opium to the Turks, furnishes the brain with many delightful visions. Thus it is that a nation may walk in its sleep until it reaches the edge of a precipice without the power of turning back. These treacherous delusions are mortal symptoms. When nothing but a drastic resolution can save the patient, false hope supplies him with palliatives, and bars the last extremity of its last resource, by the exclusion of despair.

"The history of France furnishes an example in point, on a great, but still on a very inferior scale. There never was a period of such extravagant expense and riotous profusion in Paris, as in the days that preceded the fall of the royal bank, in 1719. France was deluged with paper, as we are. Suddenly the credit of the bank failed. Down went the paper, down went Paris, and down went France."

We trust our readers will excuse us for giving such copious extracts. The subject is important. According to our estimation many erroneous conclusions are adopted, and there appears a systematic plan to dupe us into a favourable opinion of our situation. We adopt the unwelcome office of attempting to dissipate the illusion, and show things as they are without palliation, and without disguise.

K.

DISCOVERIES AND IMPROVEMENTS IN ARTS, MANUFACTURES, &c.

Patent of Mr. John Dumbell of Warrington, for a method of making a substance for spinning (resembling cotton) from flax, hemp or tow, and from shreds of cloth.

Dated August, 1808.

FLAX, and substances of this nature, are prepared for spinning in Mr. Dumbell's method, by cutting it into such short lengths as will render it fit to be spun on the same machinery used for spinning cotton: for which various instruments may be used, but Mr. Dumbell prefers the common machine called a chaff-cutter, which he enables to cut the flax better by putting straw or rushes under the flax, or by making the cutter very strong and thick, in order that the edge may not spring or give way, and causing it to act by moving in close and fair contact with a face of iron or steel, or other fit material. Other methods are mentioned for the same purpose; but as they seem too trifling to have any considerable effect, they are here omitted.

In order to divide, and separate the vegetable fibres, when thus cut into short lengths, and to render it finer, and more soft and flexible, the Patentee then works the material, by pounding, crushing, beating or rolling, and by steeping, maccerating, and digesting, boiling and bleaching, after which it is fit to spin on cotton machinery.

The Patentee operates on silk, wool, tow, and hemp in the same manner as on flax. He also mixes those materials in various ways to produce different articles of manufacture, and finds that the operation of spinning the prepared flax is much facilitated by a mixture of silk, cotton, or wool; and that the flax is rendered more fit for spinning, by subjecting the carded material to a strong pressure, with or without the application of heat, by presses, cylinders, or other instruments.

The Patentee produces a new material for spinning, from shreds of cloth, by cutting them first into stripes, and cutting them again into short pieces, and reducing them to a loose staple fit for spinning, by one or more of the mechanical operations before described.

Patent of Mr. James Barron of Wells-street, London, brass founder, for improvements in the apparatus used for rollers, for window-blinds, maps and other similar objects.

Dated Dec. 1809.

The novelty in these rollers consists in the mode of suspension, which is effected by two pieces of metal bent at right angles, one side of which is fastened to the suspending lath above, and the other side descends perpendicularly to sustain the roller. One of these bent pieces is a spring that draws the roller upwards when at rest, so as to bring its pulley into contact with the suspending lath and prevent its turning farther, by which means the blind remains stationary, at whatever position it is drawn down; the operation of drawing down the cord, causes the spring to descend sufficiently to disengage the pulley, and permit it to turn round freely; a wedge is placed beneath the spring in such a manner that by turning a screw it can be forced forward so as to make the spring stiffer when required. The other bent iron is attached to the lath by staples, along which it slides in the manner of a bolt, and is retained in its place by a spring catch; on disengaging which, it may be drawn out, and the roller be taken down from its place. Mr. Barron prefers conical sockets at the end of the bent pieces for the pivots of the rollers to turn in, as producing less friction.

Patent of Mr. George Pocock of Bristol, schoolmaster, for his invention of geographical slates for the construction of maps.

Dated June, 1808.

Mr. Pocock's invention consists in drawing and conducting lines of latitude and longitude, or other material geographical lines or projections, according to the sort of maps required, on the slates commonly used in schools; which lines shall serve as guides to learners in geography to sketch the relative situations of the different parts and kingdoms of the world. To the specification a drawing is annexed of the lines proper for the Eastern and Western hemispheres, for one of those slates (which are the same as those in the common maps.) Slates for forming maps of the several quarters of the world, or any parts of it, are prepared with appropriate lines, according to the maps required. The method which Mr. Pocock prefers for drawing those lines; is, to mark first the longitudinal lines of the globe, on a thin piece of metal, and then to cut out the space between every second pair of them, leaving alternately solid and open spaces, till the hemisphere is finished; this plate will then serve as a ruler, by which the longitudinal lines may be drawn and indented on the slate, by a sharp pointed tool, or other proper instrument: the latitudinal lines may be made in the same way, by another plate cut out in a similar manner.

Account of Nautical inventions of Mr. R. Trevithick.

Phil. Mag. V. 34, *p.* 426.

Continued from p. 54.

Mr. Trevithick proposes two methods of moving ships by steam. The first consists of a revolving wheel furnished with leaves to lay hold of the water; which is placed in an air tight receptacle only open at bottom, in which the heighth that the water is permitted to rise (or the dip of the wheel) is perfectly under the command of an air pump, which as well as the wheel is worked by a steam engine.

In the second method, a wheel, or a sufficient portion of a wheel, to which an arm of considerable length is attached, receives an alternating motion from a rack on the piston rod of the steam engine. The arm just mentioned is employed to give motion to a valve, or valves, included in an hollow trunk or prism (attached to, or actually contained in the ship) placed longitudinally,